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09/736,661	12/14/2000	Arturo A. Rodriguez	A-6280	8279

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EXAMINER

AN, SHAWN S

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 04/10/2002

#7

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.
09/736,661

Applicant(s)
Rodriguez et al.

Examiner
Shawn An

Art Unit
2613



— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jan 22, 2002
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 and 32-45 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30, 32-36, and 40-45 is/are rejected.
- 7) ☒ Claim(s) 37-39 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other:

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DETAILED ACTION

Response to Amendment

1. As per Applicant's instruction in Paper 6 as filed on 1/22/02, claims 5-7, 29, 32 have been amended, claim 31 has been canceled, and claims 33-45 have been newly added.

Response to Remarks

2. Applicant's remarks filed 1/22/02 have been fully considered but they are not persuasive. The Applicant presents arguments of which the Kalra et al's reference does not teach or disclose: A) foregoing decoding of portions of received video input as recited in claims 1 and 26; B) reducing the video decoding rate of received video input as recited in claim 29; and substantially all of the remaining dependent claims. After careful scrutiny of the prior art reference, the Examiner must respectfully disagree, and maintain the grounds of rejection for the reasons that follow.

Regarding argument A), Kalra et al clearly shows (Fig. C) foregoing decoding of portions of received video input (Drop P frame; Drop B). Furthermore, the Applicant eliminates B frame as a way of decoding portions of received input (see specification).

Regarding argument B), Kalra et al clearly discloses transcoders (coder/decoder) reducing the video decoding rate of received video input (Fig. 9A-9C, 124A-C).

Regarding dependent claims 3, 18, and 28, Kalra et al discloses bandwidth constraint (col. 17, lines 10-24) as specified. Furthermore, network bandwidth and bus bandwidth are substantially the same when they are weighted in terms of the constraint.

Regarding dependent claims 4 and 5, Kalra et al disclose an user interaction (col. 2, lines 18-50, adapting profiles) as specified.

Regarding dependent claim 7, Kalra et al disclose user interaction (User Profiles) causing graphics to be generated and output along with the video output (Fig. 2B) as specified.

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Regarding claim 8, Kalra et al disclose receiving from a video transmitter data describing the received video input (20) as specified.

Regarding claims 10 and 11, Kalra et al disclose decoding B and P frames (Fig. 9A, 102) as specified.

Regarding claim 29, Kalra et al disclose a decoding method comprising the steps of: determining that a video decoding rate should be reduced while maintaining synchronization with an unmodified audio decoding rate and reducing the video decoding rate accordingly (col. 17, lines 25-55; Fig. 9A-9C, 124A-C).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

4. Claims 1, 3-11, 15-16, 18, 21, 25-26, 28-30, 32, and 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Kalra et al (5,953,506).

Kalra et al disclose a method/a video decoding system for adapting to resource constraints, comprising the steps of: determination logic configured to determine whether a resource constrained mode is to be initiated (col. 17, lines 25-55); and initiation logic configured to initiate the resource constrained mode responsive to the determination logic, including foregoing decoding of portions of received video input (Fig. c; col. 17, lines 56-67; col. 18, lines 1-24) as specified in claims 1, 15-16, 21, and 25-26.

Regarding claims 3, 18, and 28, Kalra et al disclose inadequate bandwidth availability (col. 17, lines 10-24) as specified.

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Regarding claims 4 and 5, Kalra et al disclose an user interaction (col. 2, lines 18-50) as specified.

Regarding claim 6, Kalra et al discloses reducing spatial resolution of video output (Fig 28; col. 3, lines 60-62) as specified.

Regarding claim 7, Kalra et al discloses user interaction causing graphics to be generated and output along with the video output (Fig. 2B, User Profiles) as specified.

Regarding claim 8, Kalra et al discloses receiving from a video transmitter data describing the received video input (20) as specified.

Regarding claim 9, Kalra et al discloses MPEG (Fig. 5) as specified.

Regarding claims 10 and 11, Kalra et al disclose decoding B and P frames (Fig. 9A, 102) as specified.

Kalra et al discloses a decoding method comprising the steps of: determining that a video decoding rate should be reduced while maintaining synchronization with an unmodified audio decoding rate and reducing the video decoding rate accordingly (col. 17, lines 25-55; Fig. 9A-9C, 124A-C) as specified in claims 29-30.

Regarding claim 32, Kalra et al discloses resource constrained mode being determined (col. 17, lines 10-55) as specified.

Regarding claim 43, having an interlaced video picture output having a first set (odd fields) and a second set of display fields (even fields) is inherently well known in the art.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims (2, 17), and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra et al (5,953,506) as applied to claims 1 and 26 above, respectively, and further in view of Cismas (5,646,693).

Kalra et al discloses determining the resource constraint being initiated responsive to inadequate bandwidth availability. Kalra et al does not particularly disclose determining the resource constraint being initiated responsive to inadequate memory availability. However, it is well known in the art to compensate for a limited memory resource. Cismas teaches memory utilization for video decoding (Abs). Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing a video decoding system as taught by Kalra et al to incorporate the concept of compensating for a limited memory resource as taught by Cismas for determining the resource constraint being initiated responsive to inadequate memory availability.

7. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra et al (5,953,506) as applied to claim 1 above, and further in view of Tan et al (5,959,684).

Kalra et al disclose foregoing decoding of a plurality of frames (Fig. c) as specified in claim 12. Kalra et al does not specifically disclose repeating presentations of decoded frames. However, Tan et al discloses well known concept of repeating presentations of decoded frames (col. 3, lines 4-29) as specified in claim 12. Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing a video decoding system as taught by Kalra et al to incorporate the concept of repeating presentations of decoded frames as taught by Tan et al for repeating presentations of decoded frames to a user in place of the plurality of frames that are not decoded.

Regarding claims 13 and 14, decoded frames comprises I, P, and B frames. Therefore, it is considered inherently obvious to repeat either I, P, or B frames as specified.

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8. Claims 19-20 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra et al (5,953,506).

Regarding claims 19-20, utilizing look-up-table (col. 11, lines 1-17) and a record keeping of a history of resource need are well known the art. Therefore, it is considered quite obvious for determining the amount of additional resource according to a look-up-table or a history of resource need.

Regarding claim 22, not only it's obvious to maintain existing resource priorities controlling devices using the resources, Kalra et al always maintains resource priorities.

Regarding claim 23, note that Kalra et al's system can be used in a home computer for viewing videos by an user.

Regarding claim 24, nowhere in Kalra reference suggests or discloses de-synchronizing audio and video data during the resource constrained mode.

9. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra et al (5,953,506) as applied to claim 1 above, and further in view of Casavant et al (5,426,464).

Kalra et al does not specifically disclose having a first picture rate and a second picture rate that is higher than the first picture rate. However, Casavant et al discloses the well known concept of 3:2 pull-down (24 to 60 Hertz) method, that effectively teaches having a first picture rate (24 Hertz) and a second picture rate (60 Hertz) that is higher than the first picture rate (col. 1, lines 44-68) as specified in claim 33. Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing a method for adapting to resource constraints as taught by Kalra et al to incorporate the concept of having a first picture rate (24 Hertz) and a second picture rate (60 Hertz) that is higher than the first picture rate as taught by Casavant et al in order to effectively convert from film to video for a display on television.

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10. Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra et al and Casavant et al as applied to claim 33 above, and further in view of Tan et al (5,959,684).

Kalra et al does not specifically disclose repeating presentations of decoded frames. However, Tan et al discloses well known concept of repeating presentations of decoded frames (col. 3, lines 4-29). Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing a method for adapting to resource constraints as taught by Kalra et al to incorporate the concept of repeating presentations of decoded frames as taught by Tan et al for repeating presentations of a decoded picture in place of a picture that is not decoded.

Regarding claim 35, since repeating decoded picture is well known in the art (Tan et al), it is considered inherently obvious to repeat only five times if a subsequent picture is not decoded.

Regarding claim 36, Casavant discloses a first picture rate (24 Hertz) and a second picture rate (60 Hertz) that is higher than the first picture rate (col. 1, lines 44-68) as specified

11. Claims 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra et al (5,953,506) in view of Casavant et al (5,426,464) and Tan et al (5,959,684).

Kalra et al discloses a method for adapting to resource constraints, comprising the steps of: determining whether a resource constrained mode is to be initiated (col. 17, lines 25-55); and initiate the resource constrained mode responsive to determining the resource constrained mode is to be initiated, including foregoing decoding of portions of received video input (Fig. c; col. 17, lines 56-67; col. 18, lines 1-24) as specified in claim 40. Kalra et al does not specifically disclose having a first picture rate and a second picture rate that is higher than the first picture rate. However, Casavant et al discloses the well known concept of 3:2 pull-down method, that effectively teaches having a first picture rate (24 Hertz) and a second picture rate (60 Hertz) that is higher than the first picture rate (col. 1, lines 44-68) as specified in claims 40 and 42. Kalra et al does not specifically disclose repeating presentations of decoded frames. However, Tan et al discloses well known concept of repeating presentations of decoded frames (col. 3, lines 4-29).

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Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing a method for adapting to resource constraints as taught by Kalra et al to incorporate the concept of repeating presentations of decoded frames as taught by Tan et al for repeating presentations of a decoded picture in place of a picture that is not decoded, and also incorporate the concept of having a first picture rate (24 Hertz) and a second picture rate (60 Hertz) that is higher than the first picture rate as taught by Casavant et al in order to effectively convert from film to video for a display on television.

Regarding claim 41, since repeating decoded picture is well known in the art (Tan et al), it is considered inherently obvious to repeat only five times if a subsequent picture is not decoded.

12. Claims 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalra et al (5,953,506) as applied to claim 43 above, and further in view of Boussina et al (4,216,504).

Kalra et al does not specifically disclose a well known concept of copying from the content of the first set of display fields to the second set of display fields. However, Boussina et al teaches repeating (copying) fields (col. 9, lines 12-38) as specified in claims 44-45. Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing a method for adapting to resource constraints as taught by Kalra et al to incorporate the concept of repeating (copying) fields as taught by Boussina et al so that the content of the second set of display fields is copied from the content of the first set of display fields in order to avoid jitter artifacts.

Allowable Subject Matter

13. Claims 37-39 are objected to as being dependent upon a rejected base claim 1 but would be allowable: if claim 37 is rewritten in independent form including all of the limitations of the base claim 1. Dependent claims 37-39 recite the novel features comprising the step of: retrieving a first set of video data from a memory component, wherein the first set of video data corresponds to a first video picture; scaling the first set of video data into a second set of video

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data corresponding to a second video picture that is smaller than the first video picture; transmitting the second set of video data to a display device, wherein the second set of video data is not stored in the memory component prior to being transmitted; and transmitting graphics data to the display device, wherein the graphic data is displayed contemporaneously with the second set of video data.

The art of record fails to anticipate or make obvious the novel feature as specified in these dependent claims. Accordingly, if the amendments are made to the claims listed above, and if rejected claims are canceled, the application would be placed in condition for allowance.


Conclusion


14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawn An whose telephone number is (703) 305-0099.

SSA


April 5, 2002


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
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